

WOOD STAIN EXTENDER

Urethane Coatings a division of Era Polymers Pty Ltd

Chemwatch Hazard Alert Code: 2

Version No: 3.3

Safety Data Sheet according to HSNO Regulations

Issue Date: **07/06/2018**Print Date: **07/06/2018**S.GHS.NZL.EN

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	WOOD STAIN EXTENDER
Synonyms	Not Available
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains solvent naphtha petroleum, heavy aromatic)
Other means of identification	Not Available

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses Designed to be added to TIMBER STAINS manufactured by Urethane Coatings to dilute colour.

Details of the supplier of the safety data sheet

Registered company name	Era Polymers NZ	Urethane Coatings a division of Era Polymers Pty Ltd
Address	57 Rangi Road, Takanini, Auckland 2105 New Zealand	2-4 Green Street, BANKSMEADOW NSW 2019 Australia
Telephone	+64 9 269 0710	+61 (0)2 9666 3888
Fax	+61 9 269 4140	+61 (0)2 9666 4805
Website	www.erapol.co.nz	www.urethanecoatings.com.au
Email	Not Available	george@urethanecoatings.com.au

Emergency telephone number

Association / Organisation	Not Available	СНЕМWATCH
Emergency telephone numbers	Not Available	Not Available
Other emergency telephone numbers	Not Available	Not Available

CHEMWATCH EMERGENCY RESPONSE

Primary Number	Alternative Number 1	Alternative Number 2
+800 2436 2255	+800 2436 2255	+612 9186 1132

Once connected and if the message is not in your prefered language then please dial 01

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

Considered a Hazardous Substance according to the criteria of the New Zealand Hazardous Substances New Organisms legislation. Classified as Dangerous Goods for transport purposes.

Classification ^[1]	Flammable Liquid Category 4, Eye Irritation Category 2A, Carcinogenicity Category 2, Specific target organ toxicity - single exposure Category 3 (respiratory tract irritation), Aspiration Hazard Category 1, Chronic Aquatic Hazard Category 2	
Legend:	1. Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI	
Determined by Chemwatch using GHS/HSNO criteria	6.9 (respiratory), 9.1B, 6.1E (aspiration), 6.7B, 6.4A, 3.1D	

Label elements

Hazard pictogram(s)







SIGNAL WORD

DANGER

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Hazard statement(s)

H227	Combustible liquid.	
H319	Causes serious eye irritation.	
H351	uspected of causing cancer.	
H335	May cause respiratory irritation.	
H304	May be fatal if swallowed and enters airways.	
H411	Toxic to aquatic life with long lasting effects.	

Precautionary statement(s) General

P101	If medical advice is needed, have product container or label at hand.	
P102	Keep out of reach of children.	
P103	Read label before use.	

Precautionary statement(s) Prevention

P201	Obtain special instructions before use.	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.	
P271	Use in a well-ventilated area.	
P280	Wear protective gloves/protective clothing/eye protection/face protection.	
P261	Avoid breathing mist/vapours/spray.	
P273	Avoid release to the environment.	

Precautionary statement(s) Response

P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician/first aider.	
P308+P313	IF exposed or concerned: Get medical advice/ attention.	
P331	Do NOT induce vomiting.	
P370+P378	In case of fire: Use alcohol resistant foam or normal protein foam to extinguish.	
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
P312	Call a POISON CENTER/doctor/physician/first aider/if you feel unwell.	
P337+P313	If eye irritation persists: Get medical advice/attention.	
P391	Collect spillage.	
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.	

Precautionary statement(s) Storage

P405	Store locked up.	
P403+P233	Store in a well-ventilated place. Keep container tightly closed.	

Precautionary statement(s) Disposal

P501	Dispose of contents/container in accordance with local regulations.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
64742-94-5	>70	solvent naphtha petroleum, heavy aromatic
78-59-1	10-30	isophorone

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	If this product comes in contact with the eyes: • Wash out immediately with fresh running water. • Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. • Seek medical attention without delay; if pain persists or recurs seek medical attention. • Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin or hair contact occurs: ▶ Flush skin and hair with running water (and soap if available). ▶ Seek medical attention in event of irritation.
Inhalation	 If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.

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Ingestion

- Immediately give a glass of water.
 - First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.
 - If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmacologically. Mechanical means should be used if it is considered necessary to evacuate the stomach contents; these include gastric lavage after endotracheal intubation. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours.

For acute or short term repeated exposures to petroleum distillates or related hydrocarbons:

- Primary threat to life, from pure petroleum distillate ingestion and/or inhalation, is respiratory failure.
- Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or
 poor arterial blood gases (pO2 50 mm Hg) should be intubated.
- Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.
- A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax.
- Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.
- Lavage is indicated in patients who require decontamination, ensure use of cuffed endotracheal tube in adult patients. [Ellenhorn and Barceloux: Medical Toxicology]

for simple ketones:

BASIC TREATMENT

- Establish a patent airway with suction where necessary.
- Watch for signs of respiratory insufficiency and assist ventilation as necessary.
- Administer oxygen by non-rebreather mask at 10 to 15 l/min
- ▶ Monitor and treat, where necessary, for pulmonary oedema .
- Monitor and treat, where necessary, for shock.
- ▶ DO NOT use emetics. Where ingestion is suspected rinse mouth and give up to 200 ml water (5mL/kg recommended) for dilution where patient is able to swallow, has a strong gag reflex and does not drool.
- ► Give activated charcoal.

ADVANCED TREATMENT

- Consider orotracheal or nasotracheal intubation for airway control in unconscious patient or where respiratory arrest has occurred.
- ► Consider intubation at first sign of upper airway obstruction resulting from oedema.
- ▶ Positive-pressure ventilation using a bag-valve mask might be of use.
- Monitor and treat, where necessary, for arrhythmias.
- Start an IV D5W TKO. If signs of hypovolaemia are present use lactated Ringers solution. Fluid overload might create complications.
- ▶ Drug therapy should be considered for pulmonary oedema.
- Hypotension with signs of hypovolaemia requires the cautious administration of fluids. Fluid overload might create complications.
- Treat seizures with diazepam.
- ▶ Proparacaine hydrochloride should be used to assist eye irrigation.

EMERGENCY DEPARTMENT

Laboratory analysis of complete blood count, serum electrolytes, BUN, creatinine, glucose, urinalysis, baseline for serum aminotransferases (ALT and AST), calcium, phosphorus and
magnesium, may assist in establishing a treatment regime. Other useful analyses include anion and osmolar gaps, arterial blood gases (ABGs), chest radiographs and electrocardiograph.

Positive end-expiratory pressure (PEEP)-assisted ventilation may be required for acute parenchymal injury or adult respiratory distress syndrome.

► Consult a toxicologist as necessary.

BRONSTEIN, A.C. and CURRANCE, P.L.

EMERGENCY CARE FOR HAZARDOUS MATERIALS EXPOSURE: 2nd Ed. 1994

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

- Foam.
- Dry chemical powder.
- ► BCF (where regulations permit)
- Carbon dioxide.
- Water spray or fog Large fires only.

Special hazards arising from the substrate or mixture

Fire Incompatibility

▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

Advice for firefighters

- ► Alert Fire Brigade and tell them location and nature of hazard.
- ▶ Wear full body protective clothing with breathing apparatus.
- ▶ Prevent, by any means available, spillage from entering drains or water course.
- Fire Fighting

 Use water delivered as a fine spray to control fire and cool adjacent area.
 - Avoid spraying water onto liquid pools.
 - ► DO NOT approach containers suspected to be hot.
 - ▶ Cool fire exposed containers with water spray from a protected location.
 - ► If safe to do so, remove containers from path of fire.

▶ Combustible.

- Slight fire hazard when exposed to heat or flame.
- ► Heating may cause expansion or decomposition leading to violent rupture of containers.
- On combustion, may emit toxic fumes of carbon monoxide (CO).
- Fire/Explosion Hazard

 May emit acrid smoke.
 - ► Mists containing combustible materials may be explosive.

Combustion products include: carbon dioxide (CO2)

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other pyrolysis products typical of burning organic material.

WARNING: Long standing in contact with air and light may result in the formation

of potentially explosive peroxides.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Methods and material for con	
Minor Spills	 Environmental hazard - contain spillage. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Contain and absorb spill with sand, earth, inert material or vermiculite. Wipe up. Place in a suitable, labelled container for waste disposal.
Major Spills	Environmental hazard - contain spillage. Moderate hazard. Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. No smoking, naked lights or ignition sources. Increase ventilation. Stop leak if safe to do so. Contain spill with sand, earth or vermiculite. Collect recoverable product into labelled containers for recycling. Absorb remaining product with sand, earth or vermiculite. Collect solid residues and seal in labelled drums for disposal. Wash area and prevent runoff into drains. If contamination of drains or waterways occurs, advise emergency services.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

The conductivity of this material may make it a static accumulator., A liquid is typically considered nonconductive if its conductivity is below 100 pS/m and is considered semi-conductive if its conductivity is below 10 000 pS/m., Whether a liquid is nonconductive or semi-conductive, the precautions are the same., A number of factors, for example liquid temperature, presence of contaminants, and anti-static additives can greatly influence the conductivity of a liquid.

- ► Containers, even those that have been emptied, may contain explosive vapours.
- ▶ Do NOT cut, drill, grind, weld or perform similar operations on or near containers · Avoid all personal contact, including inhalation.
- ▶ Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
 - Prevent concentration in hollows and sumps.
 - DO NOT enter confined spaces until atmosphere has been checked
 - ► Avoid smoking, naked lights or ignition sources. Avoid contact with incompatible materials.
 - ► When handling, **DO NOT** eat, drink or smoke
 - Keep containers securely sealed when not in use.
 - Avoid physical damage to containers.
 - Always wash hands with soap and water after handling.
 - ▶ Work clothes should be laundered separately.
 - Use good occupational work practice.
 - Observe manufacturer's storage and handling recommendations contained within this SDS.
 - ▶ Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions.

Other information

Safe handling

- ▶ Store in original containers.
- Keep containers securely sealed. ► Store in a cool, dry, well-ventilated area.
- Store away from incompatible materials and foodstuff containers.
- Protect containers against physical damage and check regularly for leaks.
- ▶ Observe manufacturer's storage and handling recommendations contained within this SDS.

Conditions for safe storage, including any incompatibilities

Suitable container

- ▶ Metal can or drum
- Packaging as recommended by manufacturer.
- ► Check all containers are clearly labelled and free from leaks.

▶ is a peroxidisable liquid which forms unstable and possibly explosive peroxides on exposure to air

Storage incompatibility

- reacts with strong oxidisers causing fire, explosion reacts violently with aldehydes, nitric acid, perchloric acid
- reducing agents, including hydrides, nitrides, alkali metals, and sulfides, may generate flammable hydrogen gas and heat may cause explosion
- is incompatible (may release flammable gases such as hydrogen) with acids, aldehydes, aliphatic amines, anhydrides, cyanides, strong bases, hydrogen

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- peroxide, isocyanates
- ▶ attacks some plastics, resins, and rubber

For alkyl aromatics:

The alkyl side chain of aromatic rings can undergo oxidation by several mechanisms. The most common and dominant one is the attack by oxidation at benzylic carbon as the intermediate formed is stabilised by resonance structure of the ring.

- Following reaction with oxygen and under the influence of sunlight, a hydroperoxide at the alpha-position to the aromatic ring, is the primary oxidation product formed (provided a hydrogen atom is initially available at this position) this product is often short-lived but may be stable dependent on the nature of the aromatic substitution; a secondary C-H bond is more easily attacked than a primary C-H bond whilst a tertiary C-H bond is even more susceptible to attack by oxygen
- Monoalkylbenzenes may subsequently form monocarboxylic acids; alkyl naphthalenes mainly produce the corresponding naphthalene carboxylic acids.
- Oxidation in the presence of transition metal salts not only accelerates but also selectively decomposes the hydroperoxides.
- Hock-rearrangement by the influence of strong acids converts the hydroperoxides to hemiacetals. Peresters formed from the hydroperoxides undergo Criedee rearrangement easily.
- ▶ Alkali metals accelerate the oxidation while CO2 as co-oxidant enhances the selectivity.
- ▶ Microwave conditions give improved yields of the oxidation products.
- ▶ Photo-oxidation products may occur following reaction with hydroxyl radicals and NOx these may be components of photochemical smogs.

Oxidation of Alkylaromatics: T.S.S Rao and Shubhra Awasthi: E-Journal of Chemistry Vol 4, No. 1, pp 1-13 January 2007

- ▶ Vigorous reactions, sometimes amounting to explosions, can result from the contact between aromatic rings and strong oxidising agents.
- ► Aromatics can react exothermically with bases and with diazo compounds.

Ketones in this group:

- ▶ are reactive with many acids and bases liberating heat and flammable gases (e.g., H2).
- react with reducing agents such as hydrides, alkali metals, and nitrides to produce flammable gas (H2) and heat.
- reincompatible with isocyanates, aldehydes, cyanides, peroxides, and anhydrides.
- react violently with aldehydes, HNO3 (nitric acid), HNO3 + H2O2 (mixture of nitric acid and hydrogen peroxide), and HClO4 (perchloric acid).
- ▶ may react with hydrogen peroxide to form unstable peroxides; many are heat- and shock-sensitive explosives.

A significant property of most ketones is that the hydrogen atoms on the carbons next to the carbonyl group are relatively acidic when compared to hydrogen atoms in typical hydrocarbons. Under strongly basic conditions these hydrogen atoms may be abstracted to form an enolate anion. This property allows ketones, especially methyl ketones, to participate in condensation reactions with other ketones and aldehydes. This type of condensation reaction is favoured by high substrate concentrations and high pH (greater than 1 wt% NaOH).

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

200 ppm

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
New Zealand Workplace Exposure Standards (WES)	isophorone	Isophorone	Not Available	Not Available	5 ppm / 28 mg/m3	6.7B - Suspected carcinogen

EMERGENCY LIMITS

ingredient	Waterial Harrie	IEEL-I		TEEL-Z	IEEL-3
isophorone	Isophorone	12 ppm		33 ppm	200 ppm
Ingredient	Original IDLH		Revise	d IDLH	
solvent naphtha petroleum, heavy	Not Available		Not Ava	ailable	

Exposure controls

isophorone

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard 'physically' away from the worker and ventilation that strategically 'adds' and 'removes' air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use.

Not Available

Employers may need to use multiple types of controls to prevent employee overexposure.

General exhaust is adequate under normal operating conditions. Local exhaust ventilation may be required in specific circumstances. If risk of overexposure exists, wear approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas. Air contaminants generated in the workplace possess varying 'escape' velocities which, in turn, determine the 'capture velocities' of fresh circulating air required to effectively remove the contaminant.

Appropriate engineering controls

Type of Contaminant:	Air Speed:
solvent, vapours, degreasing etc., evaporating from tank (in still air).	0.25-0.5 m/s (50-100 f/min)
aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)	0.5-1 m/s (100-200 f/min.)
direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)	1-2.5 m/s (200-500 f/min.)
grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion).	2.5-10 m/s (500-2000 f/min.)

Within each range the appropriate value depends on:

Lower end of the range	Upper end of the range
1: Room air currents minimal or favourable to capture	1: Disturbing room air currents

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2: Contaminants of low toxicity or of nuisance value only.	2: Contaminants of high toxicity
3: Intermittent, low production.	3: High production, heavy use
4: Large hood or large air mass in motion	4: Small hood-local control only

Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used

Personal protection









Eye and face protection

Safety glasses with side shields Chemical goggles

Contact lenses may pose a special hazard: soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eve redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]

Skin protection

The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.

Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.

Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include:

- frequency and duration of contact,
- chemical resistance of glove material,
- glove thickness and
- dexterity

Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 2161.1 or national equivalent).

- When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.
- When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.
- Some glove polymer types are less affected by movement and this should be taken into account when considering gloves for long-term use.

Hands/feet protection

Contaminated gloves should be replaced.

As defined in ASTM F-739-96 in any application, gloves are rated as:

- Excellent when breakthrough time > 480 min
- Good when breakthrough time > 20 min
- Fair when breakthrough time < 20 min
- Poor when glove material degrades

For general applications, gloves with a thickness typically greater than 0.35 mm, are recommended.

It should be emphasised that glove thickness is not necessarily a good predictor of glove resistance to a specific chemical, as the permeation efficiency of the glove will be dependent on the exact composition of the glove material. Therefore, glove selection should also be based on consideration of the task requirements and knowledge of breakthrough times.

Glove thickness may also vary depending on the glove manufacturer, the glove type and the glove model. Therefore, the manufacturers' technical data should always be taken into account to ensure selection of the most appropriate glove for the task.

Note: Depending on the activity being conducted, gloves of varying thickness may be required for specific tasks. For example:

- Thinner gloves (down to 0.1 mm or less) may be required where a high degree of manual dexterity is needed. However, these gloves are only likely to give short duration protection and would normally be just for single use applications, then disposed of.
- Thicker gloves (up to 3 mm or more) may be required where there is a mechanical (as well as a chemical) risk i.e. where there is abrasion or puncture potential

Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.

- ▶ Wear chemical protective gloves, e.g. PVC.
- ▶ Wear safety footwear or safety gumboots, e.g. Rubber

Body protection

See Other protection below

Other protection

- Overalls P.V.C. apron.
- Barrier cream
- Skin cleansing cream.
- Eye wash unit

Respiratory protection

Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content. The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

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Appearance	Clear liquid		
Physical state	Liquid	Relative density (Water = 1)	0.9
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Available	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Available
Flash point (°C)	Not Available	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	0.07	Gas group	Not Available
Solubility in water (g/L)	Not Available	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	 Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting. The acute toxicity of inhaled alkylbenzene is best described by central nervous system depression. These compounds may also act as general anaesthetics. Whole body symptoms of poisoning include light-headedness, nervousness, apprehension, a feeling of well-being, confusion, dizziness, drowsiness, ringing in the ears, blurred or double vision, vomiting and sensations of heat, cold or numbness, twitching, tremors, convulsions, unconsciousness, depression of breathing, and arrest. Heart stoppage may result from cardiovascular collapse. A slow heart rate and low blood pressure may also occur. Alkylbenzenes are not generally toxic except at high levels of exposure. Their breakdown products have low toxicity and are easily eliminated from the body. Workers exposed to 5-8 ppm isophorone for 1 month complained of fatigue and malaise. The low volatility of isophorone means that high vapour concentrations are unlikely unless material is heated. However the low odour threshold level enhances nuisance value. Eye, nose, throat irritation was reported at concentrations below 5 ppm.

Inhaled

Nausea, headache, dizziness, faintness, inebriation was reported at concentrations above 200 ppm.

Symptoms of exposure through inhalation include headache, dizziness, faintness, inebriation, feelings of suffocation, wheezing, shortness of breath, nausea and vomiting.

Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo.

Inhaling high concentrations of mixed hydrocarbons can cause narcosis, with nausea, vomiting and lightheadedness. Low molecular weight (C2-C12) hydrocarbons can irritate mucous membranes and cause incoordination, giddiness, nausea, vertigo, confusion, headache, appetite loss, drowsiness, tremors and stupor.

Central nervous system (CNS) depression may include general discomfort, symptoms of giddiness, headache, dizziness, nausea, anaesthetic effects, slowed reaction time, slurred speech and may progress to unconsciousness. Serious poisonings may result in respiratory depression and may be fatal.

Ingestion

Swallowing isophorone may lead to irritation of the mouth and throat, headache, abdominal pain, drowsiness, central nervous system depression and unconsciousness The material has NOT been classified by EC Directives or other classification systems as 'harmful by ingestion'. This is because of the lack of

corroborating animal or human evidence. Ingestion of petroleum hydrocarbons can irritate the pharynx, oesophagus, stomach and small intestine, and cause swellings and ulcers of the mucous.

Symptoms include a burning mouth and throat; larger amounts can cause nausea and vomiting, narcosis, weakness, dizziness, slow and shallow breathing, abdominal swelling, unconsciousness and convulsions.

Skin Contact

Open cuts, abraded or irritated skin should not be exposed to this material

Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

The liquid may be able to be mixed with fats or oils and may degrease the skin, producing a skin reaction described as non-allergic contact dermatitis. The material is unlikely to produce an irritant dermatitis as described in EC Directives. The material may accentuate any pre-existing dermatitis condition

Eve

Isophorone vapours may be irritating at concentrations of 40-60 parts per million, with higher concentrations causing more intense irritation. In rabbits, one drop caused inflammation of the eyelids and conjunctiva, excessive secretion of tears, clouding of the cornea and a purulent (pus-laden) discharge which disappeared within 14 days

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	1		
	Direct eye contact with petroleum hydrocarbons can be pail irritation and excessive tear secretion. There is evidence that material may produce eye irritation in inflammation may be expected with pain.	•	
Chronic	Long-term exposure to the product is not thought to product nevertheless exposure by all routes should be minimised as	is a matter of course. Admage. Animal studies showed bons may produce stupor with dizz sure may result in drying and crack	that chronic exposure may lead to an increased rate of cancers ness, weakness and visual disturbance, weight loss and ng and redness of the skin.
	TOXICITY	IRRITATION	
WOOD STAIN EXTENDER	Not Available	Not Available	
	TOXICITY		IRRITATION
achient nouhthe netroloum	dermal (rat) LD50: >2000 mg/kg ^[1]		Eye (rabbit): Irritating
solvent naphtha petroleum, heavy aromatic	Inhalation (rat) LC50: >0.59 mg/l/4H ^[2]		
	Oral (rat) LD50: >2000 mg/kg ^[1]		
	TOXICITY		IRRITATION
	dermal (rat) LD50: 1390 mg/kg ^[2]		Eye (human): 25 ppm/15m
isophorone	Inhalation (guinea pig) LC50: 9189.5028 mg/l/8H ^[2]		Eye (rabbit): 0.92 mg - SEVERE
	Oral (rat) LD50: 1870 mg/kg ^[2]		Eye (rabbit): 100 mg/24h-moderate
			Skin (rabbit): 100 mg/24h
Legend:	Value obtained from Europe ECHA Registered Substan	nces - Acute toxicity 2.* Value obta	ned from manufacturer's SDS. Unless otherwise specified
Legend:	data extracted from RTECS - Register of Toxic Effect of ch	hemical Substances	
Legend:	Asthma-like symptoms may continue for months or even ye reactive airways dysfunction syndrome (RADS) which can RADS include the absence of previous airways disease in a hours of a documented exposure to the irritant. Other crite severe bronchial hyperreactivity on methacholine challenge asthma) following an irritating inhalation is an infrequent di substance. On the other hand, industrial bronchitis is a disparticles) and is completely reversible after exposure cass No significant acute toxicological data identified in literatur. A member or analogue of a group of aliphatic and alicyclic Most alicyclic substances used as flavour ingredients are in	hemical Substances pars after exposure to the material of a cocur after exposure to high leve a non-atopic individual, with sudder a for diagnosis of RADS include the testing, and the lack of minimal higher with rates related to the coorder that occurs as a result of exposure that occurs are that	nds. This may be due to a non-allergic condition known as sof highly irritating compound. Main criteria for diagnosing a onset of persistent asthma-like symptoms within minutes to a reversible airflow pattern on lung function tests, moderate to imphocytic inflammation, without eosinophilia. RADS (or incentration of and duration of exposure to the irritating posure due to high concentrations of irritating substance (often by difficulty breathing, cough and mucus production. ucturally related substances generally regarded as safe. occur naturally in a wide variety of foods.
	Asthma-like symptoms may continue for months or even ye reactive airways dysfunction syndrome (RADS) which can RADS include the absence of previous airways disease in hours of a documented exposure to the irritant. Other crite severe bronchial hyperreactivity on methacholine challenge asthma) following an irritating inhalation is an infrequent di substance. On the other hand, industrial bronchitis is a dis particles) and is completely reversible after exposure ceas No significant acute toxicological data identified in literatur. A member or analogue of a group of aliphatic and alicyclic Most alicyclic substances used as flavour ingredients are r With the exception of pulegone, alicyclic substances show were observed at any dose level. For isophorone: Acute toxicity: In animals, the acute toxicity of isophorone is being excreted within one day. Isophorone irritates the eye a	hemical Substances paars after exposure to the material on occur after exposure to high leve a non-atopic individual, with sudderia for diagnosis of RADS include testing, and the lack of minimal hisorder with rates related to the cosorder that occurs as a result of expension of the cosorder that occurs as a result of expension of the cosorder that occurs as a result of expension of the cosorder with rates related to the cosorder that occurs as a result of expension of expension of the cosorder with rates and the cosorder with rates and bicyclic terpenses which very low oral acute toxicity. In most low to moderate. The tendency of and the airway, but not the skin. It int toxic effects with repeat doses we sting, it is concluded that isophoror flicting results regarding the cancer sophorone interferes adversely with	nds. This may be due to a non-allergic condition known as a of highly irritating compound. Main criteria for diagnosing in onset of persistent asthma-like symptoms within minutes to a reversible airflow pattern on lung function tests, moderate to imphocytic inflammation, without eosinophilia. RADS (or incentration of and duration of exposure to the irritating posure due to high concentrations of irritating substance (often by difficulty breathing, cough and mucus production. Bucturally related substances generally regarded as safe, occur naturally in a wide variety of foods, subchronic studies performed on animals, no adverse effects as sophorone to accumulate in the body is very low, with most of a not sensitizing in animal studies, are given by mouth. Inhalation studies showed eye irritation, are does not cause mutations. Causing potential of isophorone.
ISOPHORONE WOOD STAIN EXTENDER &	Asthma-like symptoms may continue for months or even ye reactive airways dysfunction syndrome (RADS) which can RADS include the absence of previous airways disease in a hours of a documented exposure to the irritant. Other crite severe bronchial hyperreactivity on methacholine challenge asthma) following an irritating inhalation is an infrequent di substance. On the other hand, industrial bronchitis is a disparticles) and is completely reversible after exposure ceas No significant acute toxicological data identified in literatur. A member or analogue of a group of aliphatic and alicyclic Most alicyclic substances used as flavour ingredients are in With the exception of pulegone, alicyclic substances show were observed at any dose level. For isophorone: Acute toxicity: In animals, the acute toxicity of isophorone is being excreted within one day. Isophorone irritates the eye at Repeat dose toxicity: Animal testing did not show significant with changes to the liver and blood. Genetic toxicity: Overall, on the basis of all results from test Cancer-causing potential: Animal testing has shown confl Reproductive toxicity: There is no evidence that indicates is Developmental toxicity: Even at the highest concentrations. Animal studies indicate that normal, branched and cyclic p inversely proportional to the carbon chain length, with little oil, n-paraffins may be absorbed to a greater extent than is	hemical Substances paars after exposure to the material of a cocur after exposure to high leve a non-atopic individual, with sudderia for diagnosis of RADS include testing, and the lack of minimal hisorder with rates related to the coorder that occurs as a result of exported that occurs as a result of exposure search. In the disorder is characterized that is characterized that is considered to the course search. In the toxic terpenoid tertiany alcohols and standon-and bicyclic terpenes which very low oral acute toxicity. In most so the same that is toxic to the same that is toxic effects with repeat doses we sting, it is concluded that isophoror dicting results regarding the cances sophorone interferes adversely with used for testing, isophorone was reparaffins are absorbed from the galabsorption above C30. With respective to the gastrointestinal tract in various reports may appear unchanged as it bolism in the gut cell. The gut cell is the cast of	nds. This may be due to a non-allergic condition known as sof highly irritating compound. Main criteria for diagnosing in onset of persistent asthma-like symptoms within minutes to a reversible airflow pattern on lung function tests, moderate to imphocytic inflammation, without eosinophilia. RADS (or incentration of and duration of exposure to the irritating posure due to high concentrations of irritating substance (often by difficulty breathing, cough and mucus production. Bucturally related substances generally regarded as safe, occur naturally in a wide variety of foods, subchronic studies performed on animals, no adverse effects and sensitizing in animal studies, are given by mouth. Inhalation studies showed eye irritation, at toxic to the embryo, and did not cause birth defects. Brotherstraid tract and that the absorption of n-paraffins is control to the carbon chain lengths likely to be present in mineral species. In many cases, the hydrophobic hydrocarbons are the lipoprotein particles in the gut lymph, but most any play a major role in determining the proportion of
WOOD STAIN EXTENDER & ISOPHORONE WOOD STAIN EXTENDER & SOLVENT NAPHTHA PETROLEUM, HEAVY	Asthma-like symptoms may continue for months or even ye reactive airways dysfunction syndrome (RADS) which can RADS include the absence of previous airways disease in hours of a documented exposure to the irritant. Other crite severe bronchial hyperreactivity on methacholine challenge asthma) following an irritating inhalation is an infrequent di substance. On the other hand, industrial bronchitis is a disparticles) and is completely reversible after exposure ceas No significant acute toxicological data identified in literatur. A member or analogue of a group of aliphatic and alicyclic Most alicyclic substances used as flavour ingredients are in With the exception of pulegone, alicyclic substances show were observed at any dose level. For isophorone: Acute toxicity: In animals, the acute toxicity of isophorone is being excreted within one day. 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This product contains toluene contains ethyl benzene and naphthalene, from which anima Cancer-causing potential: Animal testing shows inhaling pein humans. Mutation-causing potential: Most studies involving gasoline studies in living human s	ears after exposure to the material of a cocur after exposure to high leve a non-atopic individual, with sudder a non-atopic individual, with sudder a non-atopic individual, with sudder a for diagnosis of RADS include the testing, and the lack of minimal hisorder with rates related to the coorder that occurs as a result of exposer. The disorder is characterized are search. It terpenoid tertiary alcohols and stanono- and bicyclic terpenes which very low oral acute toxicity. In most and the airway, but not the skin. 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In many cases, the hydrophobic hydrocarbons are the lipoprotein particles in the gut lymph, but most any play a major role in determining the proportion of in the body fat stores or the liver. In h-hexane, which can be metabolized to compounds which are concentrations of toluene lead to hearing loss. This product formation. In and kidney; these are however not considered to be relevant and kidney; these are however not considered to be relevant and kidney; these are however not considered to be relevant and kidney; these are however not considered to be relevant and kidney; these are however not considered to be relevant and kidney; these are however not considered to be relevant and kidney; these are however not considered to be relevant and kidney; these are however not considered to be relevant and kidney; these are however not considered to be relevant and kidney; these are however hot considered to be relevant and kidney; these are how
WOOD STAIN EXTENDER & ISOPHORONE WOOD STAIN EXTENDER & SOLVENT NAPHTHA PETROLEUM, HEAVY AROMATIC WOOD STAIN EXTENDER & SOLVENT NAPHTHA PETROLEUM, HEAVY HEAVY	Asthma-like symptoms may continue for months or even ye reactive airways dysfunction syndrome (RADS) which can RADS include the absence of previous airways disease in a hours of a documented exposure to the irritant. Other crite severe bronchial hyperreactivity on methacholine challenge asthma) following an irritating inhalation is an infrequent di substance. On the other hand, industrial bronchitis is a dis particles) and is completely reversible after exposure ceas No significant acute toxicological data identified in literatur A member or analogue of a group of aliphatic and alicyclic Most alicyclic substances used as flavour ingredients are n With the exception of pulegone, alicyclic substances show were observed at any dose level. For isophorone: Acute toxicity: In animals, the acute toxicity of isophorone is being excreted within one day. Isophorone irritates the eye a Repeat dose toxicity: Animal testing did not show significan with changes to the liver and blood. Genetic toxicity: Overall, on the basis of all results from tes Cancer-causing potential: Animal testing has shown confl Reproductive toxicity: There is no evidence that indicates is Developmental toxicity: Even at the highest concentrations. Animal studies indicate that normal, branched and cyclic pinversely proportional to the carbon chain length, with little oil, n-paraffins may be absorbed to a greater extent than is The major classes of hydrocarbons are well absorbed into ingested in association with fats in the diet. Some hydrocarhydrocarbons partly separate from fats and undergo metal hydrocarbons partly separate from fats and undergo metal h	ears after exposure to the material of a cocur after exposure to high leve a non-atopic individual, with sudder a non-atopic individual, with sudder a non-atopic individual, with sudder a for diagnosis of RADS include the testing, and the lack of minimal hisorder with rates related to the coorder that occurs as a result of exposer. The disorder is characterized are search. It terpenoid tertiary alcohols and stanono- and bicyclic terpenes which very low oral acute toxicity. In most and the airway, but not the skin. It not toxic effects with repeat doses we sting, it is concluded that isophoror liticting results regarding the cances supported in the sting, it is concluded that isophoror liticting results regarding the cances supported in the sting, is sophorone was reparaffins are absorbed from the galabsorption above C30. With respect to the gastrointestinal tract in various rhoms may appear unchanged as it bolism in the gut cell. The gut cell is anged in peripheral tissues such as a cause acute myeloid leukaemia, and and animal studies suggest high all testing shows evidence of tumounceroleum causes tumours of the liventations of toluene (>0.1%) can of Other studies show no adverse effect defatting of the skin which can lead	nds. This may be due to a non-allergic condition known as so of highly irritating compound. Main criteria for diagnosing in onset of persistent asthma-like symptoms within minutes to a reversible airflow pattern on lung function tests, moderate to imphocytic inflammation, without eosinophilia. RADS (or incentration of and duration of exposure to the irritating sosure due to high concentrations of irritating substance (ofter by difficulty breathing, cough and mucus production. Industry related substances generally regarded as safe. occur naturally in a wide variety of foods. Subchronic studies performed on animals, no adverse effects subchronic studies performed on animals, no adverse effects sophorone to accumulate in the body is very low, with most of it is not sensitizing in animal studies. In each serie given by mouth. Inhalation studies showed eye irritation, are does not cause mutations. In each cause mutations. In each cause mutations are interestinal tract and that the absorption of in-paraffins is control to to the embryo, and did not cause birth defects. It to the carbon chain lengths likely to be present in mineral species. In many cases, the hydrophobic hydrocarbons are in the lipoprotein particles in the gut lymph, but most any play a major role in determining the proportion of in the body fat stores or the liver. In hexane, which can be metabolized to compounds which are concentrations of toluene lead to hearing loss. This product formation. In and kidney; these are however not considered to be relevant agarding the potential to cause mutations, including all recent ause developmental effects such as lower birth weight and cate on the foetus. It is skin inflammation and may make the skin more susceptible are relevance in humans is questionable.

WOOD STAIN EXTENDER

Serious Eye Damage/Irritation	✓	STOT - Single Exposure	~
Respiratory or Skin sensitisation	0	STOT - Repeated Exposure	0
Mutagenicity	0	Aspiration Hazard	✓

Legend:

🗶 – Data available but does not fill the criteria for classification

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✓ – Data available to make classification
 ○ – Data Not Available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

WOOD STAIN EXTENDER	ENDPOINT	TEST DURATION (HR)		SPECIES	VALUE		SOURCE	
	Not Available	Not Available		Not Available Not Availab		e Not Available		
	ENDPOINT	TEST DURATION (HR)	SPECI	ES		VALUE	SOURCE	
	LC50	96	Fish			0.58mg/L	2	
olvent naphtha petroleum, heavy aromatic	EC50	48	Crusta	cea		0.76mg/L	2	
neavy aromano	EC50	72	Algae o	or other aquatic plan	ts	<1mg/L	1	
	NOEC	72	Algae o	or other aquatic plan	ts	0.3mg/L	2	
	ENDPOINT	TEST DURATION (HR)	SPECIES		VA	LUE	SOURCE	
	LC50	96	Fish		14	0mg/L	4	
isophorone	EC50	48	Crustacea	Crustacea		=117mg/L		
	EC50	96	Algae or other aquatic plants		11	110mg/L		
	NOEC	768	Fish		4.2	2-15.6mg/L	2	

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.

Wastes resulting from use of the product must be disposed of on site or at approved waste sites.

For Aromatic Substances Series:

Environmental Fate: Large, molecularly complex polycyclic aromatic hydrocarbons, or PAHs, are persistent in the environment longer than smaller PAHs.

(Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

Atmospheric Fate: PAHs are 'semi-volatile substances' which can move between the atmosphere and the Earth's surface in repeated, temperature-driven cycles of deposition and volatilization. Terrestrial Fate: BTEX compounds have the potential to move through soil and contaminate ground water, and their vapors are highly flammable and explosive.

Ecotoxicity - Within an aromatic series, acute toxicity increases with increasing alkyl substitution on the aromatic nucleus. The order of most toxic to least in a study using grass shrimp and brown shrimp was dimethylnaphthalenes > methylnaphthalenes > naphthalenes > naphtha

for Isophorone: Log Kow: 1.7-3.34; Koc: 25-384; Henry's atm m3 /mol: 5.80E-06; Henrys Law Constant: 0.38 Pa.m3/mol; BCF: 7. Melting Point: -8.1C; Water Solubility: 14.5 g/l @ 20C; Vapor Pressure: 40 Pa @ 20C:

Environmental Fate: The target compartments for isophorone will be the hydrosphere (87.6 %) and atmosphere (11.7 %).

Terrestrial Fate: Sorption of isophorone to soil or sediment organic matter is expected to be low.

Isophorone is expected to be rapidly removed by biodegradation.

Atmospheric Fate: Isophorone is rapidly removed by reaction with ozone with an estimated half-life of 23 minutes. The calculated half-life for photodegradation by reaction with hydroxy radicals is 16 hours.

Aquatic Fate: Evaporation of the substance from surface waters will occur within several days and the main removal mechanisms are expected to be biodegradation and volatilization. Photolytical degradation in surface waters is expected to be of minor and hydrolytic degradation is not to be expected.

Ecotoxicity: Isophorone is not expected to bioaccumulate and is considered to be readily biodegradable. The substance is moderately toxic to sheepshead minnow, Daphnia magna water fleas, Scenedesmus subspicatus algae and to the bacterial constituents of activated sludge. The substance is not-acutely toxic to fathead minnow. Predicted-no-effect concentration (PNEC) levels for the terrestrial compartment could not be calculated.

For Ketones: Ketones, unless they are alpha, beta--unsaturated ketones, can be considered as narcosis or baseline toxicity compounds.

Aquatic Fate: Hydrolysis of ketones in water is thermodynamically favourable only for low molecular weight ketones. Reactions with water are reversible with no permanent change in the structure of the ketone substrate. Ketones are stable to water under ambient environmental conditions. When pH levels are greater than 10, condensation reactions can occur which produce higher molecular weight products. Under ambient conditions of temperature, pH, and low concentration, these condensation reactions are unfavourable. Based on its reactions in air, it seems likely that ketones undergo photolysis in water.

Terrestrial Fate: It is probable that ketones will be biodegraded by micro-organisms in soil and water.

Ecotoxicity: Ketones are unlikely to bioconcentrate or biomagnify.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
isophorone	LOW (Half-life = 56 days)	LOW (Half-life = 0.13 days)

Bioaccumulative potential

·	
Ingredient	Bioaccumulation
solvent naphtha petroleum, heavy aromatic	LOW (BCF = 159)
isophorone	LOW (BCF = 7)

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Mobility in soil

Ingredient	Mobility
isophorone	LOW (KOC = 58.32)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

A Hierarchy of Controls seems to be common - the user should investigate:

- ▶ Reduction
- ► Reuse
- ► Recycling
- Disposal (if all else fails)

Product / Packaging disposal

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the product by filtration, distillation or some other means. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.

- ▶ DO NOT allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.
- ▶ In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- Where in doubt contact the responsible authority.
- ▶ Recycle wherever possible or consult manufacturer for recycling options.
- Consult State Land Waste Authority for disposal.
- ▶ Bury or incinerate residue at an approved site.
- ▶ Recycle containers if possible, or dispose of in an authorised landfill.

Ensure that the hazardous substance is disposed in accordance with the Hazardous Substances (Disposal) Notice 2017

Disposal Requirements

Packages that have been in direct contact with the hazardous substance must be only disposed if the hazardous substance was appropriately removed and cleaned out from the package. The package must be disposed according to the manufacturer's directions taking into account the material it is made of.

The hazardous substance must only be disposed if it has been treated by a method that changed the characteristics or composition of the substance and it is no longer hazardous.

DO NOT deposit the hazardous substance into or onto a landfill or a sewage facility.

Burning the hazardous substance must happen under controlled conditions with no person or place exposed to

- (1) a blast overpressure of more than 9 kPa; or
- (2) an unsafe level of heat radiation.

The disposed hazardous substance must not come into contact with class 1 or 5 substances.

SECTION 14 TRANSPORT INFORMATION

Labels Required



Marine Pollutant



HAZCHEM

•3Z

Land transport (DOT)

UN number	3082	
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains solvent naphtha petroleum, heavy aromatic)	
Transport hazard class(es)	Class 9 Subrisk Not Applicable	
Packing group	III	
Environmental hazard	Environmentally hazardous	
Special precautions for user	Special provisions 274; 331; 335; 375 Limited quantity 5 L	

Air transport (ICAO-IATA / DGR)

UN number	3082
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. * (contains solvent naphtha petroleum, heavy aromatic)

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Transport hazard class(es)	ICAO/IATA Class ICAO / IATA Subrisk ERG Code	9 Not Applicable 9L		
Packing group	III			
Environmental hazard	Environmentally hazardous			
Special precautions for user		Qty / Pack Packing Instructions	A97 A158 A197 964 450 L 964 450 L Y964 30 kg G	

Sea transport (IMDG-Code / GGVSee)

UN number	3082	
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains solvent naphtha petroleum, heavy aromatic)	
Transport hazard class(es)	IMDG Class 9 IMDG Subrisk Not Applicable	
Packing group	III	
Environmental hazard	Marine Pollutant	
Special precautions for user	EMS Number F-A , S-F Special provisions 274 335 969 Limited Quantities 5 L	

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

This substance is to be managed using the conditions specified in an applicable Group Standard

HSR Number	Group Standard
HSR002513	Additives, Process Chemicals and Raw Materials (Combustible, Toxic [6.7]) Group Standard 2006

SOLVENT NAPHTHA PETROLEUM, HEAVY AROMATIC(64742-94-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS

New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of New Zealand Inventory of Chemicals (NZIoC)

Chemicals

ISOPHORONE(78-59-1) IS FOUND ON THE FOLLOWING REGULATORY LISTS

New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of New Zealand Workplace Exposure Standards (WES)

New Zealand Inventory of Chemicals (NZIoC)

Location Test Certificate

Subject to Regulation 55 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations, a location test certificate is required when quantity greater than or equal to those indicated below are present.

Hazard Class	Quantity beyond which controls apply for closed containers	Quantity beyond which controls apply when use occurring in open containers
Not Applicable	Not Applicable	Not Applicable

Approved Handler

Subject to Regulation 56 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations and Regulation 9 of the Hazardous Substances (Classes 6, 8, and 9 Controls) Regulations, the substance must be under the personal control of an Approved Handler when present in a quantity greater than or equal to those indicated below.

Class of substance	Quantities
Not Applicable	Not Applicable

Refer Group Standards for further information

Tracking Requirements

Not Applicable

National Inventory	Status

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Australia - AICS	Y
Canada - DSL	Y
China - IECSC	Υ
Europe - EINEC / ELINCS / NLP	Y
Japan - ENCS	Y
Korea - KECI	Υ
New Zealand - NZIoC	Υ
Philippines - PICCS	Υ
USA - TSCA	Υ
Legend:	Y = All ingredients are on the inventory N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

SECTION 16 OTHER INFORMATION

Revision Date	07/06/2018
Initial Date	07/06/2018

Other information

Ingredients with multiple cas numbers

Name	CAS No
solvent naphtha petroleum, heavy aromatic	64742-94-5, 1189173-42-9

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

PC-TWA: Permissible Concentration-Time Weighted Average

 ${\sf PC-STEL} : {\sf Permissible Concentration-Short Term Exposure Limit}$

IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists

STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit。

IDLH: Immediately Dangerous to Life or Health Concentrations

OSF: Odour Safety Factor

NOAEL :No Observed Adverse Effect Level

LOAEL: Lowest Observed Adverse Effect Level

TLV: Threshold Limit Value

LOD: Limit Of Detection

OTV: Odour Threshold Value

BCF: BioConcentration Factors BEI: Biological Exposure Index